

WHAT IS CLAIMED IS:

1. A vibration type angular velocity sensor comprising:
a vibrator for vibrating in a driving axis direction upon
application of an AC voltage thereto;

5 a driving circuit for applying the AC voltage to the
vibrator;

a first detection circuit for producing a first signal
corresponding to a displacement of the vibrator, which occurs
in a detection axis direction perpendicular to the driving axis
10 direction in response to the AC voltage;

a second detection circuit for producing a second signal
corresponding to the first signal; and

an adjusting circuit for adjusting an amplitude of the
first signal of the first detection circuit in the same phase
15 or reverse phase,

wherein the adjusting circuit applies the adjusted first
signal to the second detection circuit as a comparison reference
signal of the second detection circuit.

20 2. The vibration type angular velocity sensor according to
claim 1, wherein:

the vibrator includes at least a pair of arm portions
disposed to face each other;

the adjusting circuit includes at least a pair of adjusting
25 circuits each producing the comparison reference signal in
opposite phases;

the second detection circuit includes a plurality of

amplifying circuits respectively provided in connection with the pair of arm portions; and

the amplifying circuits of the second detection circuit are supplied with the comparison reference signals which are adjusted to be reversed to each other by the adjusting circuit.

3. The vibration type angular velocity sensor according to claim 2, further comprising:

an offset circuit for adjusting the amplitude of a 90-degree phase-shifted first signal of the first detection circuit in the same phase or reverse phase; and

addition circuits to apply the comparison reference signals to the amplifying circuits of the second detection circuit by adding the adjusted first signals and adjusted phase-shifted first signals.

4. The vibration type angular velocity sensor according to claim 3, wherein the offset circuit adjusts, in the same phase or reverse phase, the amplitude of the AC signal to be applied from the driving circuit to the vibrator.

5. The vibration type angular velocity sensor according to claim 1, wherein the adjusting circuit includes a variable resistor for variably adjusting the comparison reference signal.